

SITE ASSESSMENT REPORT FOR

THE TOLEDO PLATE AND GLASS SITE TOLEDO, LUCAS COUNTY, OHIO

TDD: T05-9204-016 PAN: EOH09598AA TAT-05-23-02024

May 7, 1992

Prepared for:
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ecology and environment, inc.

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1.0 INTRODUCTION

The Ecology and Environment, Inc., Technical Assistance Team (TAT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a site assessment and hazard evaluation at the Toledo Plate and Glass (TPG) site, Toledo, Lucas County, Ohio, under TDD# T05-9204-016 issued April 17, 1992. Tasks to be accomplished under this TDD included preparation of a site Health and Safety Plan, review of background information, air monitoring, photodocumentation of site activities, preparation of a sampling plan, collection of samples, and determination of threat to human health and the environment. Upon request of U.S. EPA On-Scene Coordinator (OSC) Steve Renninger, the TAT conducted a site assessment and collected samples on April 22, 1992.

2.0 SITE BACKGROUND

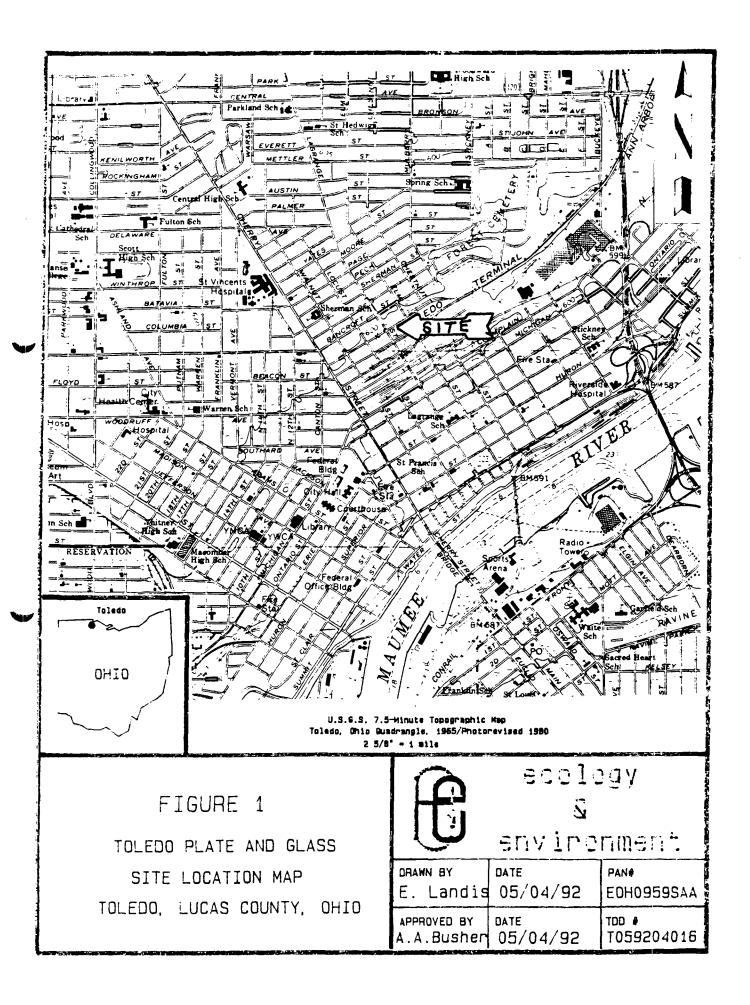
2.1 Site Description

Toledo Plate and Window Glass is located in an old industrial neighborhood at 1042 Utica Street, Toledo, Lucas County, Ohio, about 0.5 mile northwest of the Maumee River. The 80,000-square-foot building is on a 1.9-acre city block, surrounded by light industry, businesses, and residences (Figure 1). The brick building consists of two stories plus a basement.

Numerous 55-gallon drums, 5-gallon pails, and glass bottles labeled as solvents, silver nitrate, acid, lead-based paint, and chloroform were found on the main floor and in the basement. Many containers were unlabeled. According to Colleen Weaver, of the Ohio EPA's Hazardous Waste Division, the top floor of the building was office space and did not contain any drums. At the time of this site assessment, the electrical power was cut off. As a result, the sump pump was not working, and the basement was flooded with about 12 inches of ground water. Signs posted on the building's exterior indicated that the building was unsafe for habitation.

2.2 <u>Site History</u>

The building was constructed in 1905, and initially purchased by Toledo Plate and Window Glass (TPWG) in 1919. As of May 1990, the company was manufacturing mirrors. Toledo Plate and Window Glass continued doing business until 1990, when it declared Chapter 13 bankruptcy. In September of 1986, the company notified the Ohio EPA (OEPA) that the facility contained hazardous wastewater treatment sludges from electroplating operations, RCRA waste number F006, as defined in 40 CFR, Part 302.4.



The presence of drums and containers was brought to the attention of the OEPA on February 19, 1991 by the Toledo Fire Department. OEPA OSC Mike Gerber and Colleen Weaver of the OEPA Hazardous Waste Division responded to the site. The OEPA conducted several investigations of the site, and eventually determined that there were at least 200 drums and containers inside the building and 33 drums in a trailer on a lot across Utica Street (Figure 2). In May 1991, TPGW filed Chapter 7 bankruptcy, at which point Fifth Third Bank, Toledo, Ohio liquidated all the equipment inside the building.

The TPG site was brought to the attention of the U.S. EPA by the OEPA in April of 1992. As a result, the U.S. EPA tasked TAT to perform a site assessment and evaluate the site's threat to human health and the environment.

3.0 SITE ACTIVITIES

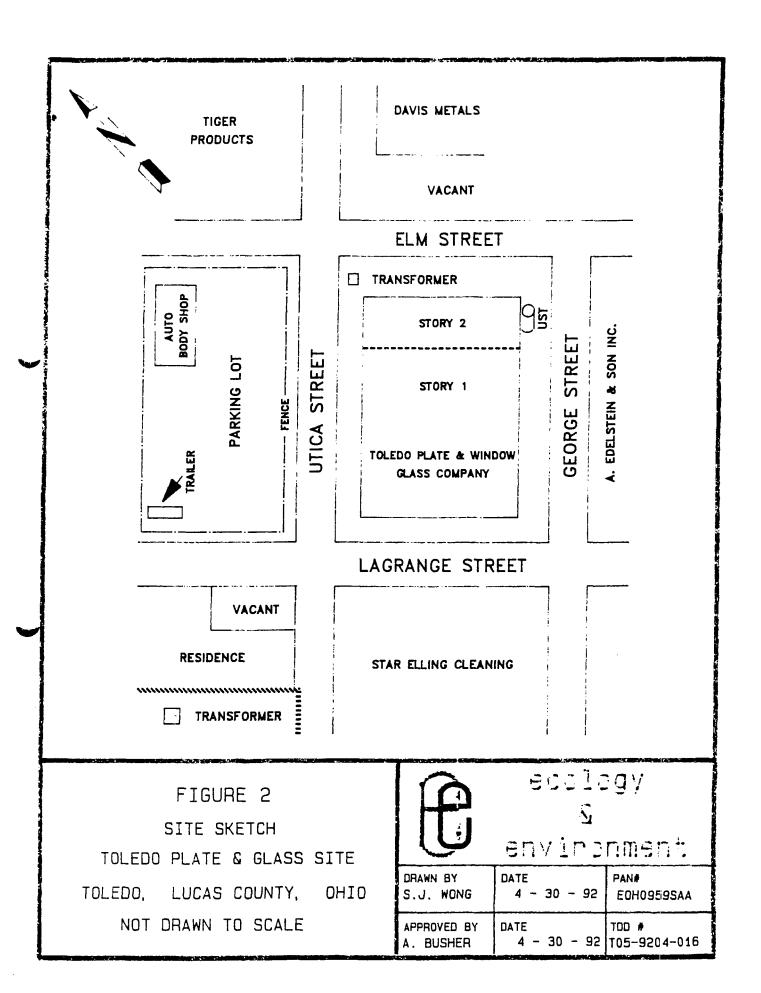
3.1 Site Reconnaissance

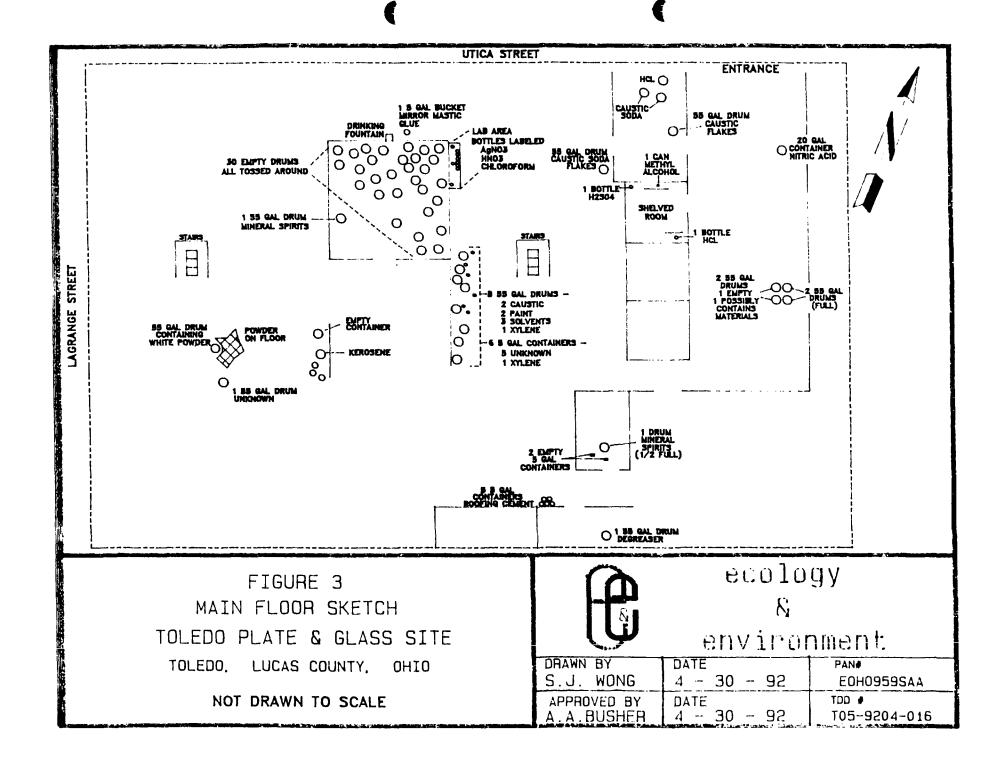
On April 22, 1992, TAT members Emily Landis, Sylvia Wong and Ronald Fodo met with U.S. EPA OSC Steve Renninger at the Toledo Plate and Glass site to conduct a site inspection. Also present were OEPA OSC Mike Gerber, Colleen Weaver from the OEPA Hazardous Waste Division, Captain Tiggs of the Toledo Fire Prevention Bureau, Paul Bach from Fifth Third Bank, and Laurie Pangle, legal attorney for Fifth Third Bank. The team entered the property from an entrance on Utica Street (Figure 2). At the time of the inspection, doors were opened on NW and SE sides of the building, allowing unrestricted access to the site.

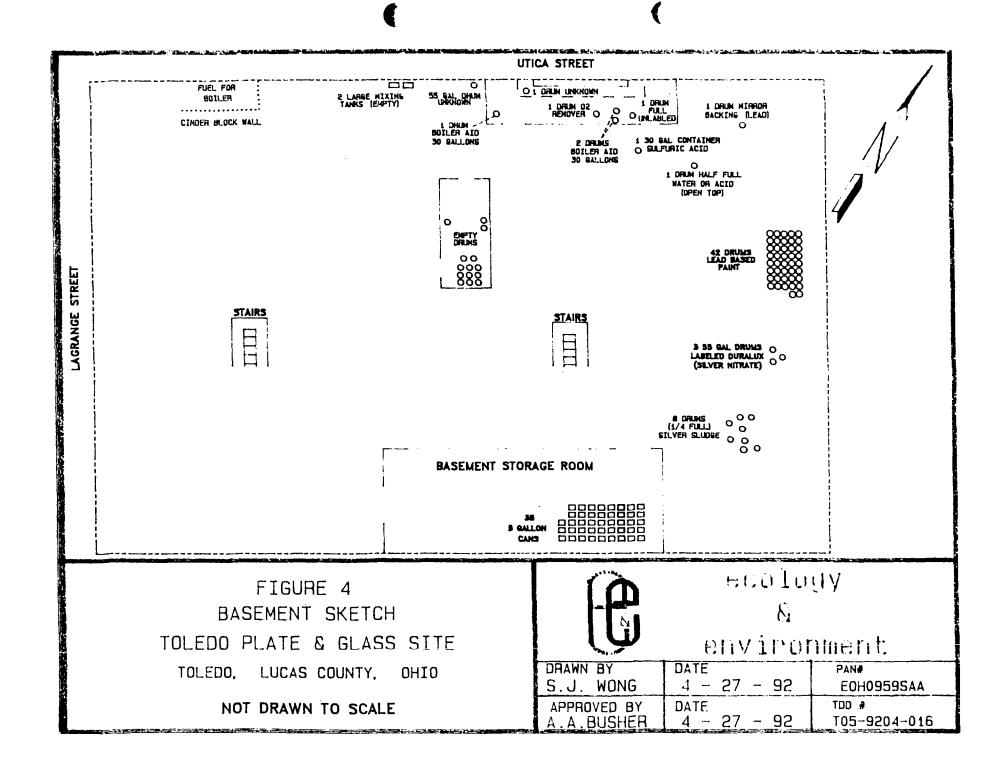
The team proceeded to observe and document drums and containers on the first floor and in the basement of the facility (Figures 3 and 4). During the initial reconnaissance, the site was screened with a radiation meter (Ludlum Model 19 Micro R Meter), a photoionization detector (HNu), and a combustible gas indicator/oxygen meter (CGI). No readings above background were detected on the CGI or HNu in the breathing zone. The radiation meter detected 8 mrem/hour above background in the basement area, particularly near white-painted brick walls on NW side.

During the initial walk-through, the TAT and OSC Renninger surveyed the general site conditions, noting the locations and conditions of drums and containers, their labels and markings, and marked several containers for pH field screening and/or sampling for laboratory analysis. The main floor was littered with broken glass, cardboard, et cetera, including potentially asbestoscontaining pipe insulation.

The entire basement was flooded with approximately 12 inches of water; because the electrical power was shut off, the sump pump was not operating. Most of the drums and containers were







standing upright, but many were floating in the water on their sides.

After the reconnaissance, the three TAT members re-entered the building to do pH field screening and to take samples (Section 3.2). The pH field screening results are presented in Table 1.

The TAT members then entered the trailer on the west side of Utica Street (Figure 5). The trailer, situated inside a fenced yard, was not secured, and not in good condition. Its stairs, tail gate, and support blocks were unstable. Twenty-eight 55-gallon drums and several 5-gallon pails were found in the trailer; no signs of leakage were observed on the trailer bed or on the soil below the trailer. HNu readings reached 5 to 10 units inside the trailer. Readings of 190 units were observed on the HNu while sampling drum TG14.

3.2 <u>Sampling Activities</u>

OSC Renninger requested that the TAT collect seven discrete samples, including a field duplicate, for laboratory analysis. The seven samples were analyzed for flashpoint by Biological & Environmental Control Laboratories, Inc. (BEC), of Twinsburg, Ohio. The pH of a given sample was also tested by BEC if the flashpoint test result was above 140° F.

Immediately after the site reconnaissance, the three TAT members re-entered the site to do field screening and to collect samples. Two TAT members worked in level "B" protection to collect samples, and another TAT member in level "C" documented the field screening results and the sampling. The liquid samples were collected from drums and pails with dedicated glass thieving rods, and were placed in labeled 4-ounce jars. The outer gloves were removed and fresh gloves donned between samples. All samples were labeled, sealed with EPA custody seals, and custody maintained in a locked room overnight. A representative of BEC Laboratories assumed custody of the samples from the TAT at noon, April 23, 1992.

4.0 ANALYTICAL RESULTS

The laboratory analyzed each of the seven samples for flashpoint using standard procedures for a Setaflash Closed Cup Tester, as outlined in SW-846, Method 1020. The results, presented in Table 2, indicate that four of the samples had flashpoints less than 140° F. The pH value of the two samples, whose flashpoints were greater than 140° F, was subsequently tested by the laboratory using a pH meter (SW-846 Method 9040). The results show that one of the two samples was a strong acid and the other was a strong base (Table 2).

TABLE 1
TOLEDO PLATE AND WINDOW GLASS SITE
pH FIELD SCREENING RESULTS

SAMPLE	На	LOCATION	DESCRIPTION/LABEL ON CONTAINERS
TG1	67	LAB AREA, MAIN FLOOR	"CAUSTIC SODA LIQUID"
TG3	0–1	LAB AREA, MAIN FLOOR	
TG4	0–1	LAB AREA, MAIN FLOOR	
TG7	0	MAIN FLOOR NW ROOM	FUMED WHEN OPENED, "HYDROCHLORIC ACID"
TG8	7	MAIN FLOOR NW ROOM	
TG9	6	MAIN FLOOR NW ROOM	
TG11	OFF SCALE	NEAR BSMNT BOILER ROOM	"SULFURIC ACID"
TG12	14	BASEMENT BOILER ROOM	"BOILER AID", "POTASSIUM HYDROXIDE"

NOTE: pH Screening performed using pH indicator strips (range 0–14).

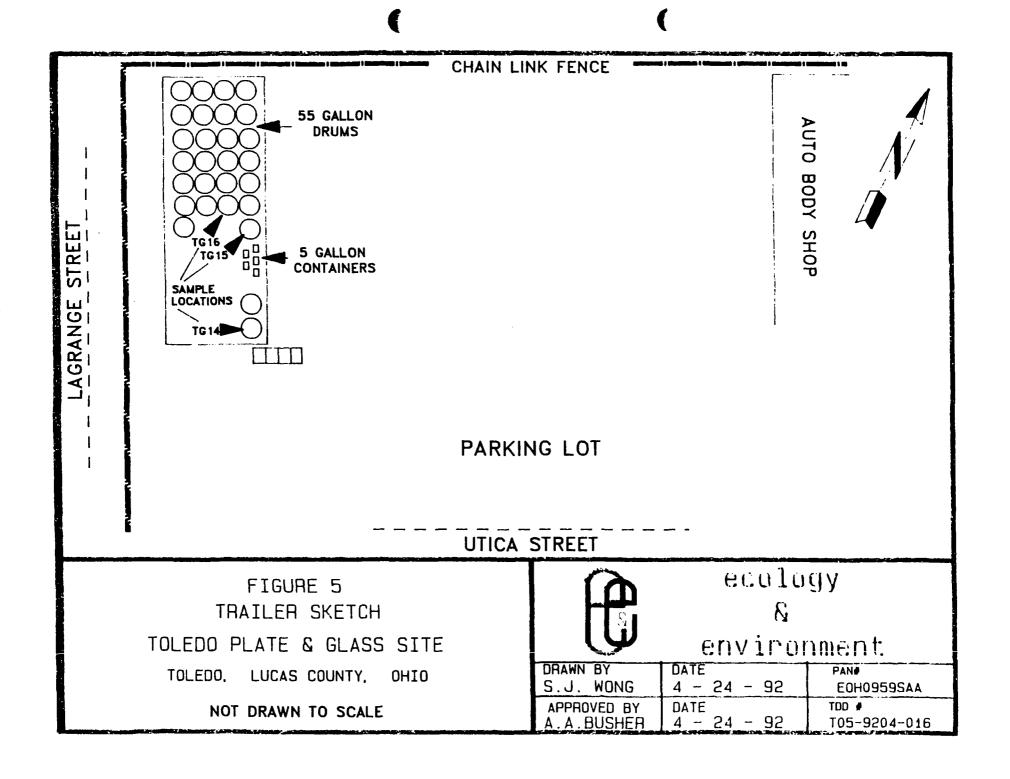


TABLE 2
TOLEDO PLATE AND WINDOW GLASS
LABORATORY ANALYTICAL RESULTS

SAMPLE	LOCATION	FLASHPOINT	На	DESCRIPTION/LABEL ON CONTAINERS
TG2	MAIN FLOOR LAB	148-150 F	<1	COLORLESS,"PETROLEUM AROMATIC NAPTHA"
TG10	MAIN FLOOR, NE ROOM	>180 F	>13	BLUE, "DEGREASER"
TG13	BASEMENT STORAGE RM	80-81 F	N/A	COLORLESS, "XYLOL"
TG14	TRAILER	71-73 F	N/A	COLORLESS, "XYLENE"
TG15	TRAILER	78-79 F	N/A	COLORLESS, "BUTYL ACETATE"
TG16	TRAILER	90-92 F	N/A	BLACK, NO LABEL
TG17	DUPLICATE OF TG13	79-81 F	N/A	COLORLESS, "XYLOL"

NOTE: Analyses performed by BEC Laboratories, Twinsburg, Ohio, April 23, 1992, under TDD # T059204807.

5.0 DISCUSSION OF POTENTIAL THREATS

The conditions presented at the site may constitute a threat to public health and welfare or the environment based upon the considerations set forth in the National Contingency Plan (NCF), 40 CFR Section 300.415 (b) (2), which include, but are not limited to the following:

o Actual or potential exposure of nearby human populations, animals, or the food chain to hazardous substances or pollutants or contaminants

Materials sampled by the TAT at the TPG site may be considered hazardous due to their characteristics of ignitability (D001) and corrosivity (D002). Four samples were ignitable, as defined in the National Contingency Plan (NCP), 40 CFR Section 261.21 (a) (1): "A solid waste exhibits the characteristic of ignitability if...It is a liquid..." that "...has a flashpoint less than 140° F, as determined by...a Setaflash Closed Cup Tester..." Two samples exhibited the characteristic of corrosivity as defined by 40 CFR section 261.22 (b) (1): "A solid waste exhibits the characteristic of corrosivity if a representative sample...is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter..."

Although posted signs warned that the building is unsuitable for habitation, the TPG site was not secured, allowing unlimited access by trespassers. Signs of vandalism and salvaging within the facility were evident throughout the site.

o Hazardous substances or pollutants or contaminants in drums, tanks or other bulk storage containers, that may pose a threat of release

The basement of the TPG site was flooded with approximately 12 inches of water. Partially full drums and containers of hazardous materials were floating on top of the water. Many of these drums and containers were in poor condition, potentially allowing hazardous substances to escape. Drums and containers in the water are especially susceptible to rusting, promoting drum failure, and causing a hazardous materials release.

In addition, potential asbestos-containing materials were found at the TPG site. Asbestos is considered a human carcinogen by the International Agency for Research on Cancer (IARC), a hazardous substance, and a priority pollutant. Airborne asbestos from the TPG facility could migrate outside the facility through broken windows.

Because of its proximity to commercial/industrial and residential areas, the TPG site poses a threat of hazardous

materials contamination to the surrounding population.

o Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

Northwestern Ohio typically has substantial rainfall in the spring and autumn; winter temperatures are normally below freezing. Heavy rains are expected to continue to accumulate and flood the basement, thereby increasing the threat of hazardous waste release and further contamination to the basement area. Freezing temperatures may cause additional damage to susceptible drums and containers.

o Threat of fire or explosion.

Laboratory analyses have proven that at least a portion of the materials on site are hazardous wastes by virtue of ignitability. These materials are in and around badly decayed drums which are readily accessible to the public. The TPG site is filled with cardboard packing material and the floors of the building are wood, making the entire site a potential fire hazard.

APPENDIX A SITE PHOTOGRAPHS

SITE NAME: Toledo Plate and Window Glass

PAGE 1 OF 14

U.S. EPA ID:

TDD: T059204016

PAN: EOHO959SAA

DATE: 4-22-92

TIME: Mid-afternoon

DIRECTION OF

PHOTOGRAPH: Northeast

WEATHER

CONDITIONS: Overcast with light

rain, ~45F.

PHOTOGRAPHED BY:

E. andis

SAMPLE ID

(if applicable):



DESCRIPTION: View of site from LaGrange Street.

DATE: 4-22-92

TIME: 11:26

DI CTION OF

PHOTOGRAPH: East

VEATHER

CONDITIONS: Overcast, ~50F.

PHOTOGRAPHED BY:

S. Wong

SAMPLE ID

(if applicable):



DESCRIPTION: Site entry was via an open door (left side of photo) on Utica Street.

SITE	NAME:	Toledo	Plate	and	Window	Glass	PAGE	2	OF	14
U.S.	EPA ID:				TDI): T05920	04016 PAN:	E	OH09	59SAA

DATE: 4-22-92

TIME: 10:27

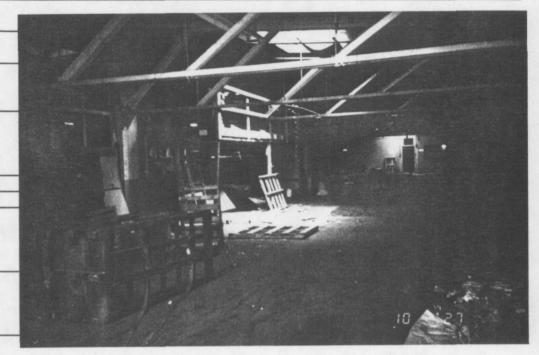
DIRECTION OF

PHOTOGRAPH: Northwest

WEATHER CONDITIONS:

PHOTOGRAPHED BY:

SAMPLE ID (if applicable):



DESCRIPTION: Interior space on main floor.

DATE: 4-22-92

TIME: 10:40

DI TION OF

PHOTOGRAPH: South

WEATHER CONDITIONS:

PHOTOGRAPHED BY: S. Renninger

SAMPLE ID (if applicable):



DESCRIPTION: Lab area in center of main floor.

SITE NAME: Toledo Plate and Window Glass PAGE 3 OF 14
U.S. EPA ID: TDD: T059204016 PAN: E0H0959SAA

DATE: 4-22-92

TIME: 10:39

DIRECTION OF PHOTOGRAPH:

WEATHER CONDITIONS:

PHOTOGRAPHED BY: S. nninger

SAMPLE ID (if applicable):



DESCRIPTION: Asbestiform material on floor adjacent to lab area.

DATE: 4-22-92

TIME: 10:42

DIA TION OF

PHOTOGRAPH: North

WEATHER CONDITIONS:

PHOTOGRAPHED BY: S. Renninger

SAMPLE ID (if applicable):



DESCRIPTION: View of site conditions, main floor.

SITE NAME: Toledo Plate and Window Glass

PAGE 4 OF 14

U.S. EPA ID:

TDD: T059204016

PAN: EOHO959SAA

DATE: 4-22-92

TIME: Early afternoon

DIRECTION OF

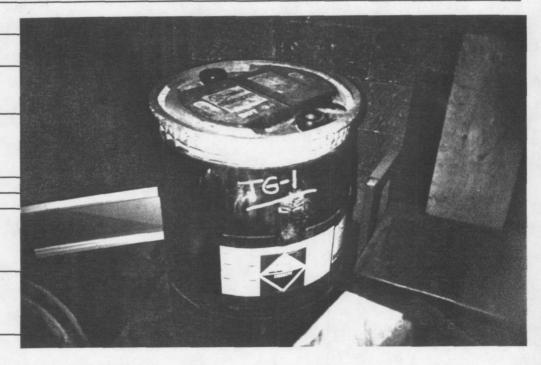
PHOTOGRAPH: Southwest

WEATHER CONDITIONS:

PHOTOGRAPHED BY:

SAMPLE ID

(if applicable): TG-1



DESCRIPTION: Plastic 55-gallon drum labelled as caustic soda liquid. Field screened pH = 6-7.

DATE: 4-22-92

TIME: Early afternoon

DIALCTION OF

PHOTOGRAPH: Northwest

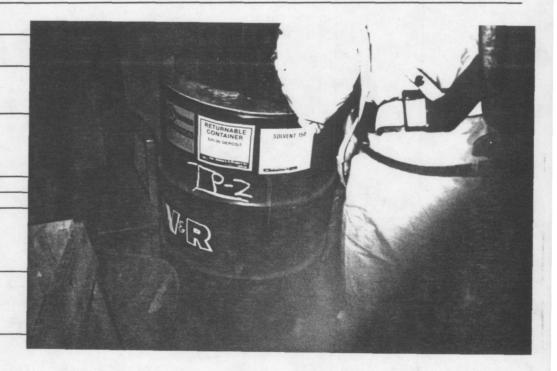
WEATHER CONDITIONS:

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID

(if applicable): TG-2



DESCRIPTION: 55-gallon steel drum labelled as a solvent containing petroleum naptha.

Laboratory analysis indicates that the content's flashpoint is greater than 140F, and has a pH of less than 1.

SITE NAME: Toledo Plate and Window Glass

TDD: T059204016

PAGE 5 OF 14 PAN: EOHO959SAA

DATE: 4-22-92

U.S. EPA ID:

TIME: Early afternoon

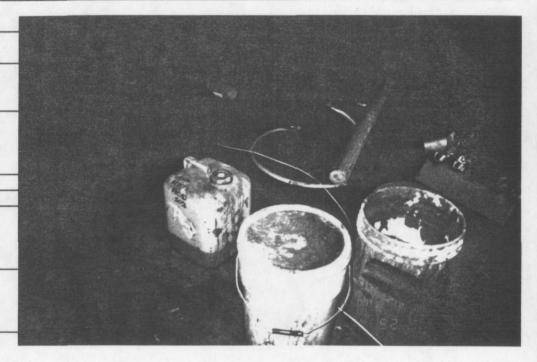
DIRECTION OF PHOTOGRAPH:

EATHER CONDITIONS:

PHOTOGRAPHED BY: ndis

SAMPLE ID

(if applicable): TG-3



DESCRIPTION: Plastic 5-gallon jug whose content was field tested to have a pH of 0-1.

DATE: 4-22-92

TIME: Early afternoon

CTION OF GRAPH:

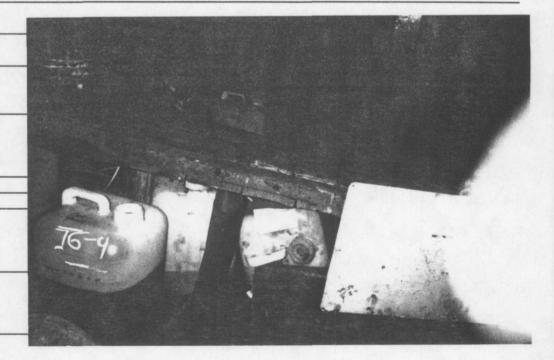
EATHER CONDITIONS:

PHOTOGRAPHED BY:

. Landis

SAMPLE ID

(if applicable): TG-4



DESCRIPTION: Plastic 5-gallon jug of liquid whose pH was field tested at 0-1.

E ELD	PHOTOGRAPHY	LOG	SHEET

SITE NAME: Toledo Plate and Window Glass

PAGE 6 OF 14

U.S. EPA ID:

TDD: T059204016

PAN: EOHO959SAA

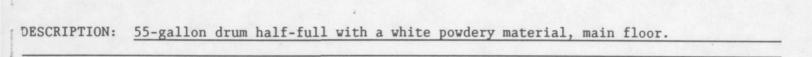


DATE:	4-22-92	TIME:	10:41	DIRECTION OF PHOTOGRAPH:		PHOTOGRAPHED BY: S	. Renninger
WEATHER CONDITIONS:						SAMPLE ID (if appli	cable):
DESCRI	PTION: Leak	ing dru	m on main floo	or of building.			

	FIELD PHOTOGRAPH	IY LOG SHEET
SITE NAME: Toledo Plate and W	indow Glass	PAGE 7 OF 14
Ū.S. EPA ID:	TDD: T059204016	PAN: EH0959SAA
DATE: 4-22-92 TIME: 10:46 DIRECTION OF PHOTOGRAPH: West WEATHER CONDITIONS:	- 23	

PH GRAPHED BY: S. Renninger

SAMPLE ID (if applicable):



DATE: 4-22-92

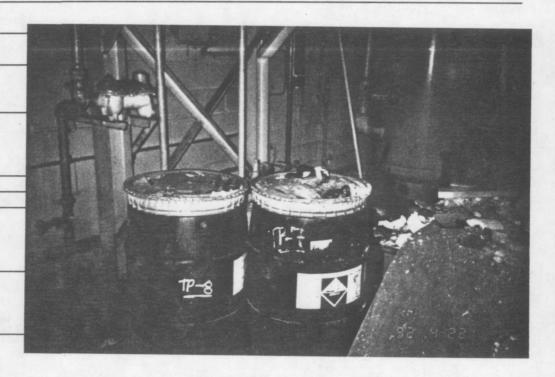
FIFE Early afternoon

DIRECTION OF PHOTOGRAPH: Northeast

WEATHER
CONDITIONS:

PHOTOGRAPHED BY: E. Landis

SAMPLE ID (if applicable): TG-7, TG-8



DESCRIPTION: 55-gallon drums in a room on the main floor's northwest side.

SITE NAME: Toledo Plate and Window Glass PAGE 8 OF 14
U.S. EPA ID: TDD: T059204016 PAN: E0H0959SAA

DATE: 4-22-92

TIME: Mid-afternoon

DIRECTION OF

PHOTOGRAPH: Northeast

WEATHER CONDITIONS:

PHOTOGRAPHED BY: E andis

SAMPLE ID

(if applicable): TG-10



DESCRIPTION: TAT members Fodo and Wong sample contents of drum labelled as a degreaser in a room on the northeast side of the building, main floor.

DATE: 4-22-92

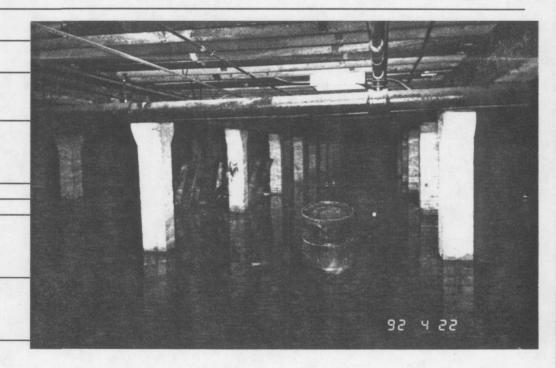
TIME: Late morning

DICTION OF PHOTOGRAPH:

WEATHER CONDITIONS:

PHOTOGRAPHED BY: S. Renninger

SAMPLE ID (if applicable):



DESCRIPTION: View of basement conditions. The entire basement was flooded with 6-8" water.

SITE NAME: Toledo Plate and Window Glass PAGE 9 OF 14
U.S. EPA ID: TDD: T059204016 PAN: E0H0959SAA

DATE: 4-22-92

TIME: Late morning

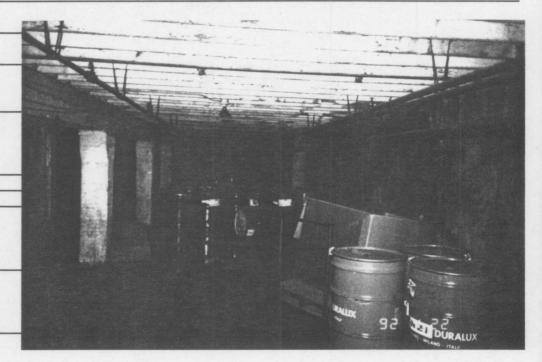
DIRECTION OF

PHOTOGRAPH: Northwest

WEATHER CONDITIONS:

PHOTOGRAPHED BY: S. nninger

SAMPLE ID (if applicable):



DESCRIPTION: View of drums labelled as lead-based paint.

DATE: 4-22-92

TIME: Early afternoon

DIA TION OF

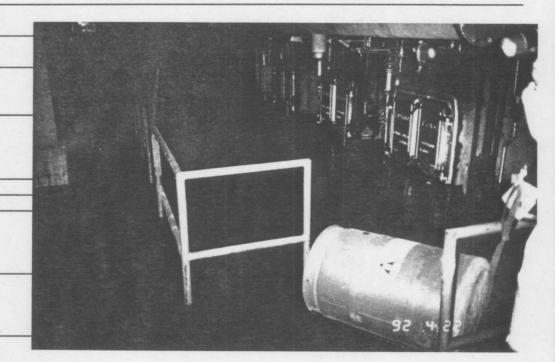
PHOTOGRAPH: West

WEATHER CONDITIONS:

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID (if applicable):



DESCRIPTION: View of basement boiler room.

FIELD PHOTOGRAPHY	LOG SHEET
SITE NAME: Toledo Plate and Window Glass U.S. EPA ID: TDD: T059204016	PAGE 10 OF 14 PAN: EOHO959SAA
DATE: 4-22-92	
TIME: _Early afternoon	vidi .
DIRECTION OF PHOTOGRAPH: Southeast	in the second se
WEATHER CONDITIONS:	
PHOTOGRAPHED BY: E. andis	BOILER AND S TO THE STATE OF TH
SAMPLE ID (if applicable): TG-12	
DESCRIPTION: Plastic 55-gallon drum labelled as Bo	iler Aid (potassium hydroxide).
DATE: 4-22-92	
TIME: Late morning	
DICTION OF PHOTOGRAPH:	
WEATHER CONDITIONS:	
PHOTOGRAPHED BY: S. Renninger	

DESCRIPTION: View in basement showing conditions and several drums.

SAMPLE ID

(if applicable):

SITE NAME: Toledo Plate and Window Glass PAGE 11 OF 14
U.S. EPA ID: TDD: T059204016 PAN: E0H0959SAA

DATE: 4-22-92

TIME: Late morning

DIRECTION OF

PHOTOGRAPH: East-northeast

WEATHER CONDITIONS:

PH GRAPHED BY: S. enninger

SAMPLE ID (if applicable):



DESCRIPTION: Entrance to a basement storage room.

DATE: 4-22-92

TIME: Early afternoon

DI TION OF

PHOTOGRAPH: South-southeast

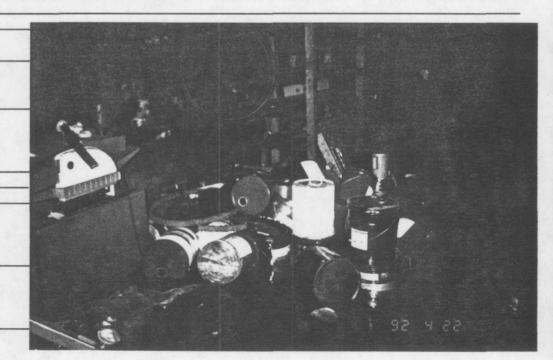
WEATHER CONDITIONS:

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID

(if applicable): TG-13



DESCRIPTION: 5-gallon pails in basement storage room. Sample TG-13 (and duplicate TG-17)
was taken from upright black pail in foreground.

SITE	NAME:	Toledo	Plate	and	Window Gl	lass	PAGE	12 OF 14	
U.S.	EPA ID	:			TDD:	T059204016	PAN:	EOH0959SAA	

DATE: 4-22-92

TIME: Early afternoon

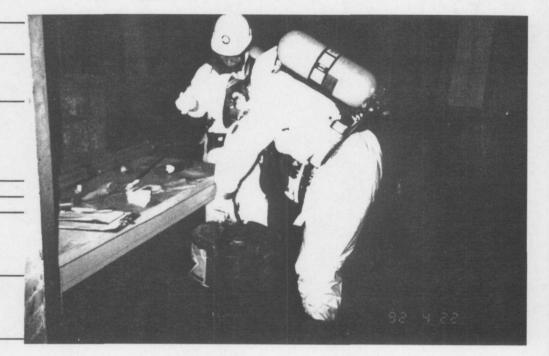
DIRECTION OF

PHOTOGRAPH: Northwest

WEATHER CONDITIONS:

PHOTOGRAPHED BY: E. Landis

SAMPLE ID (if applicable): TG-11



DESCRIPTION: TAT members Fodo and Wong testing pH of small plastic drum labelled as Sulfuric Acid.

DATE: 4-22-92

TIME: Mid-afternoon

DIRECTION OF

PHOTOGRAPH: West-southwest

WEATHER

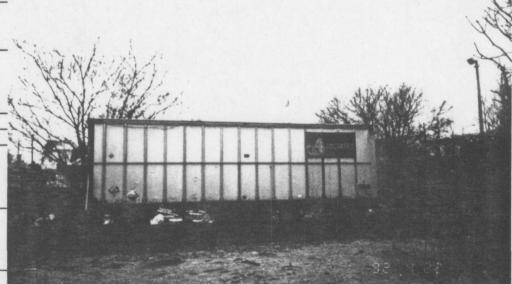
CONDITIONS: Overcast with light

rain, ~45F

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID (if applicable):



DESCRIPTION: Storage trailer on lot opposite building on Utica Street.

SITE NAME: Toledo Plate and Window Glass PAGE 13 OF 14
U.S. EPA ID: TDD: T059204016 PAN: E0H0959SAA

DATE: 4-22-92

TIME: Mid-afternoon

DIRECTION OF

PHOTOGRAPH: Southwest

WEATHER

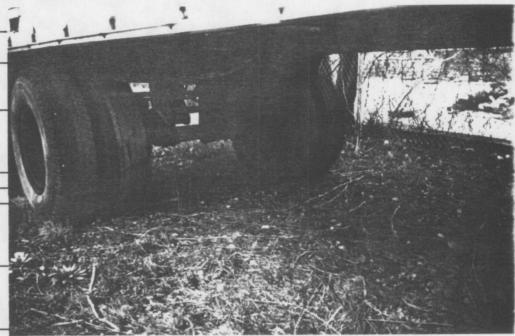
CONDITIONS: Overcast with light

rain, ~45F

TOGRAPHED BY:

E. Landis

SAMPLE ID (if applicable):



DESCRIPTION: No evidence of leakage from the trailer was present on the soil below.

DATE: 4-22-92

: Mid-afternoon

DIRECTION OF

PHOTOGRAPH: Northwest

WEATHER

CONDITIONS: Overcast with light

rain, ~45F

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID (if applicable):



DESCRIPTION: Same as above.

SITE NAME: Toledo Plate and Window Glass

PAGE 14 OF 14

U.S. EPA ID:

TDD: T059204016

PAN: EOHO959SAA

DATE: 4-22-92

TIME: Mid-afternoon

DIRECTION OF

PHOTOGRAPH: Northwest

WEATHER

CONDITIONS:

Overcast with light

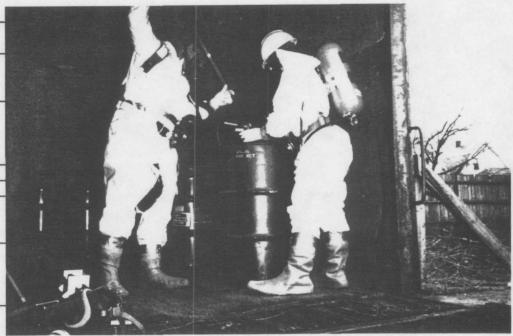
rain, ~45F

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID

(if applicable): TG14



DESCRIPTION: TAT members Fodo and Wong sample colorless liquid which had an odor like xylene.

DATE: 4-22-92

TIME: Mid-afternoon

DIPECTION OF

PH GRAPH: Northwest

WEATHER

CONDITIONS: Overcast with

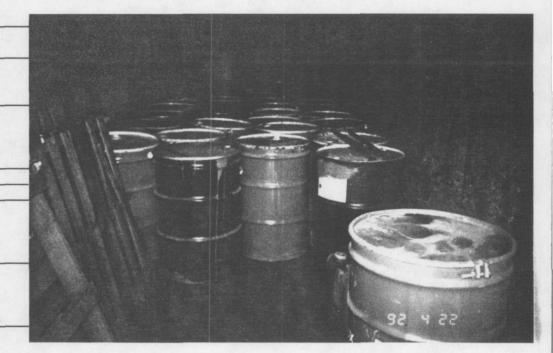
light rain, ~45F

PHOTOGRAPHED BY:

E. Landis

SAMPLE ID

(if applicable): TG-15, TG-16



DESCRIPTION: View inside trailer.

APPENDIX B ANALYTICAL DATA REVIEW



HEHORANDIIM

DATE: May 5, 1992

TO: Ronald A. Fodo, Project Manager, E & E, Cleveland, OH

FROM: George M. Albertson, TAT-Chemist, E & E, Cleveland, OH

THRU: Emily S. Landis, TAT-Geochemist, E & E, Cleveland, OH

SUBJ: Flashpoint and pH Quality Assurance Review, Toledo Plate and

Glass Site, Toledo, Lucas County, Ohio

REF: Analytical TDD: T059204807 Project TDD: T059204016

Analytical PAN: EOH0959AAA Project PAN: EOH0959SAA

The data quality assurance review of 7 grab liquid samples collected from the Toledo Plate and Glass site on April 22, 1992 is now complete. The samples were analyzed for flashpoint (EPA SW-846 method 1020) and pH (EPA SW-846 method 9040) by Biological & Environmental Control Laboratories, Toledo, Ohio.

The 7 samples were numbered TG2, TG10, TG13, TG14, TG15, TG16 and TG17 with corresponding laboratory identification numbers 92C00686 through 92C00692, respectively.

Data Qualifications:

I. Sample Holding Times:

The laboratory received the samples on April 23, 1992 and were analyzed on April 23 and 24, 1992. The OSWER Directive 9360.4-01 does not include criteria regarding hold times for these methods.

II. Calibration:

1. Flashpoint

The lab used p-xylene as the check standard. The calibration result was within 1 degree of the true standard value.

recycled disper

2. pH

The lab used check standard buffer solutions at pHs of 2.00, 4.00, 7.00 and 10.00. The calibration results did not vary by more than 0.05 pH units.

III. Duplicates:

Sample TG17 was a field duplicate of TG13. The relative percent difference between flashpoint results for these samples is 1.25.

Overall Assessment of Data for Use:

There are no criteria specified in the U.S. EPA OSWER Directive 9360.4-01 (April 1990) for the evaluation of flashpoint or pH analyses. Based on the calibration and duplicate results, the data are considered acceptable for use as reported.



biological & environmental control laboratories, inc. 615 front street toledo, ohio 43605 (419) 693-5307

1632 enterprise parkway twinsburg, ohio 44087 (216) 425-8200 kab no. 9200686

sample

ZT1051 T059204016 EBH0959SAA

description:

TG2 - MAIN FLOOR LAB - EPA TAG #5-092491 - COLORLESS LIQUID

4/22/92

ANALYTE

METHOD

RESULT

Ignitability - Setaflash

SW-846, 1020

148° - 150°F

рΗ

SW-846, 9040

less than

1

agree completed

4/23/92

DGH

Approved by:



biological & environmental control laboratories, inc. 615 front street toledo, ohio 43605 (419) 693-5307 1632 enterprise parkway twinsburg, ohio 44087 (216) 425-8200

lati no.

92C00687

sample

ZT1051 T059204016 E0H0959SAA

description:

TG10 - MAIN FLOOR NE ROOM - EPA TAG #5-092328 - BLUE LIQUID

4/22/92

ANALYTE

<u>METHOD</u>

RESULT

Ignitability - Setaflash

SW-846, 1020

greater than 180° F

ρH

SW-846, 9040

greater than 13

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1632 enterprise parkway insburg, ohio 44087 (216) 425-8200 9200688 p.o. no.

sample

ZT1051 T059204016 E0H0959SAA

description:

TG13 - BASEMENT STORAGE ROOM - EPA TAG #5-092346 - COLORLESS LIQUID

4/22/92

ANALYTE

METHOD

RESUL T

Ignitability - Setaflash

SW-846, 1020

80° - 81°F

date completed

4/23/92

DGH

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biological & environmental control laboratories, inc. 1632 enterprise parkway twinsburg, ohio 44087 (216) 425-8200 lab no.

92000489

p.o. no.

sample

ZT1051 T059204016 E0H0959SAA

description:

TG14 - TRAILER - EPA TAG #5-092500 - COLORLESS LIQUID

4/22/92

ANALYTE

METHOD

RESULT

Ignitability - Setaflash

SW-846, 1020

71° - 73°F



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biological & environmental control laboratories, inc. 1632 enterprise parkway twinsburg, ohio 44087 (216) 425-8200 lab no. 9200690

p.o. no.

sample

ZT1051 T059204016 EDH0959SAA

description:

TG15 - TRAILER - EPA TAG #5-092418 - COLORLESS LIQUID

4/22/92

ANALYTE

METHOD

RESULT

Ignitability - Setaflash

SW-846, 1020

78* - 79"F

idate completed:

4/24/92

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1632 enterprise parkway twinsburg, ohio 44087 (216) 425-8200 laio no.

92000691

p.o. no.

sample

ZT1051 T059204016 E0H0959SAA

description:

TG16 - TRAILER - EPA TAG #5-092419 - BLACK LIQUID

4/22/92

ANALYTE

METHOD

RESULT

Ignitability - Setaflash

SW-846, 1020

90° - 92°F

date completed:

4/24/92

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ialo no. " 92000692 p.o. no.

sample

ZT1051 T059204016 E0H0959SAA

description:

TG17 - BASEMENT STORAGE RM - EPA TAG #5-092101 - COLORLESS LIQUID

4/22/92

ANALYTE

METHOD

RESULT

Ignitability - Setaflash

SW-846, 1020

79° - 81°F

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